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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,671	02/14/2001	Ofer Zimmerman	ENS-002-CIP-4	9657

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EXAMINER

SEFCHECK, GREGORY B

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 08/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/783,671

Applicant(s)

ZIMMERMAN ET AL.

Examiner

Gregory B Sefcheck

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Applicant's Amendment filed 5/24/2004 is acknowledged.
- Claim 4 is cancelled.
- Claims 1-3 and 5-10 are pending.
- The previous objection to claim 3 is withdrawn.
- The replacement formal drawings of Figs. 1, 6, and 8, filed 5/24/2004, are approved.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3 and 5-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Evans et al. (US006151312A), hereafter Evans.

- In regards to Claims 1, 6, 8, and 10,

Evans discloses a network protocol that supplies a method and apparatus for allocating bandwidth in a broadband wireless point to multipoint system between a base station and multiple users (Title; Abstract; Col. 1, lines 8-20; claim 1/8 –

method/apparatus for allocating bandwidth in broadband wireless system including plurality of CPE in communication with base stations).

Referring to Fig. 2, Evans shows the spectrum bandwidth allocations for downstream and upstream transmissions between the base station (AIU) and the plurality of users (NIU; Col. 5, lines 23-49; claim 1/8 – base stations maintain uplink and downlink sub-frame maps representative of the bandwidth allocations).

Evans discloses that the base station receives packets from users on upstream transmissions (Col. 2, lines 4-5; claim 1/8 – means for obtaining a packet).

The base station receives idle cells (padding packets), as defined by the ATM Forum, from users that have no data to transmit in their assigned upstream timeslot (Col. 18, lines 50-57; claim 1/8 – means for determining if the obtained packet is a padding packet).

The base station detects idle cells received at its modem (Col. 14, line 58) from a user through the use of messages (flag packets) from the specified user to the CPU of the base station (Col. 15, lines 24-26; Col. 17, lines 24-53; claim 1/8 – if padding packet, means for alerting a base station CPU, coupled to determining means, of the padding packet and an associated CPE).

The base station CPU may de-allocate reserved time slots for a user that is not utilizing all their bandwidth for data (Col. 19, lines 58-64; claim 1/8 – means for reducing bandwidth allocation of the CPE, coupled to base station CPU; claim 6/10 – base station modem performs/comprises obtaining step/means; claim 6/10 – base station CPU performs/comprises determining, alerting, and reducing step/means).

- In regards to Claims 2, 3, 5, 7, and 9,

Evans discloses a network protocol that supplies a method for allocating bandwidth in a broadband wireless point to multipoint system between a base station and multiple users that covers all limitations of the parent claim.

Evans shows that the base station CPU is alerted that idle cells have been received at the base station modem through a message (flag packet) that specifies the associated user (Col. 14, line 58; Col. 15, lines 24-26; Col. 17, lines 48-51; claim 2 – alerting a base station CPU comprises transmitting a flag packet to a base station CPU; claim 3 – flag packet comprises information regarding an associated CPE), at which time the base station CPU may issue a control message for resetting the user's bandwidth allocations; claim 5/9 – base station modem performs/comprises obtaining, determining and alerting steps/means; claim 5/9 – base station CPU performs/comprises reducing step/means; claim 7 – reducing step comprises resetting all requested bandwidth for the associated CPE).

Response to Arguments

3. Applicant's arguments filed 5/24/2004 have been fully considered but they are not persuasive.

- On pg. 4 of the Remarks, the Applicant contends that Evans does not "describe the concept of detecting padding packets and, in response to that detection, reducing the bandwidth allocation of the CPE that is transmitting the padding packets" as in claim 1.
- The Examiner respectfully disagrees. As shown in the rejection of claim 1 above and in Evans on lines 49-57 of column 18, Evans discloses an AIU (base station) that deallocates the bandwidth of an NIU (CPE) when that NIU transmits idle cells (padding packets) in a reserved time slot. Evans shows that the determination of received cell types and NIU bandwidth allocations/de-allocations are performed by a CPU of the AIU (Col. 15, lines 24-26).
- On 6-14 of pg. 5 of the Remarks, the Applicant contends that Evans does not disclose a "base station CPU alerting means which is coupled to the packet determining means, and which alerts a base station of a padding packet and the associated CPE" as in claim 8.

- The Examiner respectfully disagrees. As shown above, Evans discloses an NIU transmitting idle cells in a reserved timeslot when it has no data available to transmit. Evans discloses that the AIU may deallocate bandwidth for an NIU that is not utilizing its reserved timeslots for data (Col. 18, lines 49-57). It is inherent that the AIU is operable to differentiate between idle cells and data cells if such a deallocation is to be possible. In Evans, this inherent identification of an idle cell from an NIU in its reserved timeslot by the AIU CPU acts as both a packet determining means and alerting means for the AIU.

- Also on pg. 5 of the Remarks, lines 14-17, the Applicant contends that Evans does not "describe a modem with the ability to determine when a padding packet has been received" as in claim 9.

- The Examiner respectfully disagrees. On lines 57-58 of column 14 and lines 24-26 of column 15, Evans discloses that modems at the AIU and NIU support the physical flow of data between the CPUs of the AIU and NIU. On lines 49-57 of column 18, Evans further discloses idle cells from the NIU may be received and recognized by the AIU, which acts to deallocate bandwidth from the NIU utilizing reserved timeslots to transmit idle cells.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory B Sefcheck whose telephone number is 703-305-0633. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GBS
7-29-2004



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